



# Air Force Research Laboratory|AFRL

*Science and Technology for Tomorrow's Air and Space Force*

## **Success Story**

### **DR. BRUCE W. SUTER WINS ARTHUR S. FLEMING AWARD**



Dr. Bruce W. Suter, a principal researcher in the Information Directorate, sponsored by the Air Force Office of Scientific Research, received the 2002 Arthur S. Fleming Award for achievements in both technical and managerial issues. Dr. Suter was one of 12 outstanding public servants working in the federal government to receive this award in 2002.



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## Accomplishment

Dr. Suter, the directorate's principal researcher in information signal processing technology, consistently pushes the fundamental principles of science through extensive personal study and collaboration with his peer group. Dr. Suter's peer group includes professionals at the National Research Council, the Dayton Area Graduate Studies Institute, and many nationally recognized researchers in academia. These arrangements resulted in formal publication of advanced concepts in Hankel and Tchebyshev transforms and their application to a broad spectrum of scientific applications for improved information signal processing.

## Background

Dr. Suter was instrumental in the establishment of the directorate's Center for Integrated Transmission and Exploitation (CITE) and currently serves as director and principal researcher of CITE. CITE is an organization whose goal is to explore the system-level issues involved by simultaneously considering both communications and exploitation.

Dr. Suter also serves as a technical consultant in the area of data compression for the Air Expeditionary Force Battlelab. He recently completed a very extensive wavelet-based video compression consulting activity entitled "Global Information Compression Methodology & Implementation for Enhanced Command Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance System Integration."

Dr. Suter has authored an advanced technical monograph, *Multirate and Wavelet Signal Processing* (Academic Press, 1998), together with over one hundred conference and journal publications, demonstrating exceptional ability and superior performance continuously in his career. His publications include papers on multirate and wavelet signal processing, numerical linear algebra, transform theory (Fourier, Hankel, Radon Wavelet), neural networks, parallel processing, and computer arithmetic.

Dr. Suter received a US patent for the fastest fast Fourier transform implementation ever devised. The Air Force Materiel Command (AFMC) recognized Dr. Suter in 2001 for his work in the technology transfer of his patent by honoring him with one of the highest awards of the AFMC—2000 General Ronald W. Yates Award for Excellence in Technology Transfer.

The Arthur S. Fleming Award program, established in 1948 by the Downtown Jaycees, educates the public about the contributions young civil servants make to America. To date, just 400 people have received this honor. Past Fleming honorees include Senator Daniel Patrick Moynihan (1965); Elizabeth Hanford Dole (1971); and Dr. Anthony Fauci, Director of the National Institute for Allergies and Infectious Diseases (1979).

## Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (03-OSR-04)